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ADVANCED COMPUTER TECHNIQUES CORP ARLINGTON VA  
RESEARCH EFFORT TO DEVELOP OPERATIONAL IMPROVEMENTS TO BIOLOGIC--ETC(U)  
MAY 76 W H SMITH

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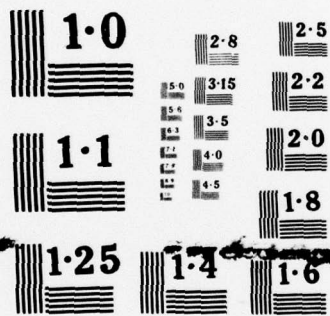
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NATIONAL BUREAU OF STANDARDS  
MICROCOPY RESOLUTION TEST CHART

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REPORT NUMBER 10

6 RESEARCH EFFORT TO DEVELOP OPERATIONAL IMPROVEMENTS  
TO BIOLOGICAL PROGRAMS.

9 ANNUAL REPORT no. 10,  
1 Sep 74 - 30 Aug 75

10 ACT TECHNICAL STAFF  
WILLIAM H. SMITH  
Principal Investigator

11 15 May 76

12 5P.

Supported by

U.S. ARMY MEDICAL RESEARCH & DEVELOPMENT COMMAND  
Washington, D.C. 20314

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Advanced Computer Techniques Corporation  
1501 Wilson Blvd., Arlington, Virginia 22209

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FOREWARD

The present contractual effort is a continuation of a research project initiated in August of 1967.

This research is conducted under the overall cognizance of Col. William E. Rothe, V.C. Director of the Division of Medicinal Chemistry, and is conducted under the immediate direction of Lt. Col. Kenneth E. Kinnanon, Head of the Department of Biology.

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## I. INTRODUCTION

Walter Reed Institute of Research (WRAIR) has developed a complex network of computer programming systems for storage, retrieval and association of chemical structures information and related data resulting from biology tests. Walter Reed, being the recipient of this data, is faced with accomodating it into a format that can be processed and evaluated at WRAIR.

Advanced Computer Techniques Corporation has supported the research efforts at WRAIR primarily in the area of developing Biological Programming Systems and developing necessary system interfaces with other major systems involved in WRAIR areas of interest.

During the contractual period covered by this report the following efforts were enacted:

- A. Implementation of a new biology system.
- B. Developing improvements to existing IBM 7090/94 biology systems.
- C. Providing production assistance as required.

## II. OBJECTIVES

- A. Implementation of new biology system for the CDC 3500.
- B. Developing special searches, reports and other one-time requirements.

## III. ACCOMPLISHMENTS DURING THE YEAR

- A. The following programs were completed for the new biology system on the CDC 3500.
  - 1. Preprocessor
  - 2. Edit
  - 3. Match/merge on sample number
  - 4. Sort on source code
  - 5. Match/merge on source code
  - 6. Biology-inventory report



7. Code-10 Address labels
  8. Sort/merge biology transaction files
  9. Update
  10. Overdue processing
  11. Backup/restore master files.
  12. Conversion programs
- B. Production assistance was provided as required during the year for both regular system production/testing and parallel processing of new system.
- C. Conversion of old master files to new format for processing with new biology system.

#### IV. CONCLUSION

At the end of the contract year the new biology system was completed for the CDC 3500. This system was not made operational due to slip-page in development of Chemistry system.

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